

**Amendments To the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1       Claim 1 (currently amended): A switching network comprising:

2           a)        a first stage of switches having input lines and output lines and  
3                   comprising  $m (n \times k)$  switches, wherein  $m$  is an integer number,  $n$  is  
4                   an integer number representing the number of input lines and  $k$  is an  
5                   integer number representing the number of output lines;  
6           b)        a second stage of switches comprising of  $m (k' \times k')$  switches,  $k'$  is an  
7                   integer number representing the number of inputs and outputs; and  
8           c)        a third stage of switches comprising of  $m (k \times n)$  switches,  
9                   wherein  $k'$  is selected such that  $m*Q(k'/m) \geq k$  (where  $Q(x/y)$  denotes the  
10                  quotient of dividing  $x$  by  $y$ ) to allow using  $m$  switches in the second stage.

1       Claim 2 (currently amended): A switching network comprising:  
2             $m$  identical modules, said module further comprising  
3            a)        an input stage comprising of a  $(n \times k)$  switch wherein  $n$  is an  
4                   integer number representing the number of input lines and  $k$  is  
5                   an integer number representing the number of output lines;  
6           b)        a middle stage comprising of a  $(k' \times k')$  switch,  $k'$  is an integer  
7                   number representing the number of inputs and outputs; and  
8           c)        an output stage comprising of a  $(k \times n)$  switch  
9                   wherein  $k$ ,  $k'$ , and  $m$  satisfy  $m*Q(k'/m) \geq k$ .

1       Claim 3 (currently amended): A method of constructing a switching network comprising:

2           a)        using  $m$  identical modules[,];  
3           b)        constructing said module from an input stage comprising of a  $(n \times k)$   
4                   switch, a middle stage comprising of a  $(k' \times k')$  switch, an output stage  
5                   comprising of a  $(k \times n)$  switch; and  
6           c)        selecting  $k'$  such that  $m*Q(k'/m) \geq k$ .

1        Claim 5 (currently amended): A method of constructing a  $v(k, n, m)$  switching network  
2        for values of  $m$  belonging to a non-empty set  $\mathcal{M}$  comprising:  
3            a)      using  $m$  identical modules[,];  
4            b)      constructing said module from an input stage comprising of a  $(n \times k)$  switch, a  
5                    middle stage comprising of a  $(k' \times k')$  switch, an output stage comprising of a  $(k'$   
6                     $\times n)$  switch; and  
7            c)      selecting  $k'$  such that  $m^*Q(k'/m) \geq k$  for all values of  $m$  belonging to set  $\mathcal{M}$ .